

IPFIX Export per SCTP Stream

IPFIX IETF-69 July 24th, 2007

<draft-claise-ipfix-export-per-sctp-stream-01.txt>

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[IPFIX-PROTO] Reminder

- All Template Sets **SHOULD** be sent on the SCTP stream 0
- Data Sets **MUST NOT** be sent on stream 0
- Data Sets are sent on a different SCTP stream

Proposal

- **Each Template Set SHOULD be sent on the same unique stream as its associated Data Set**

Advantages

- **Data loss for each Template Record can be deduced**

From the Sequence Number in the IPFIX Message header (sequence counter of all IPFIX Data Records sent on this PR-SCTP stream)

- **Collecting Process's job is easier**

Sure that the Templates arrive before the Data Records, as the transmission order is maintained within a SCTP stream (but not across streams)

Not Enough Streams?

- **New Template creation can lead to a stream exhaustion**
- **Solution**
 - Add new streams (draft-stewart-sctpstrrst-05.txt) with the existing SCTP association**
 - OR**
 - Use stream 1, the only one that can export multiple Template Sets.**

Open Issue

- **What if the Option Template Record is used in multiple streams?**

Proposal: Leave it open

Send a single time

OR Send in every stream (guarantee the transmission order)

Note: The template ID is unique per SCTP association and Observation Domain

Discussion

- **Does it clash with IPFIX-PROTO?**

No. We don't use stream 0, except for Template Withdraw Message

No. "All Templates Records **SHOULD be sent on the SCTP stream 0"**

- **Conclusion:**

I see this specification as an useful IPFIX extension

New WG item?

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